

CLAIMS

1. A display device employing a field-sequential method, comprising:

a light source having a plurality of colors of emitted light;

a light emission switching unit for sequentially switching the plurality of colors of emitted light of said light source within one frame;

a light switching element for controlling an intensity of light from said light source for display;

a control unit for controlling synchronization of a light-emission timing of each color of emitted light of said light source and a switching of said light switching element; and

a frame number changing unit for changing a frame number per unit time.

2. The display device of claim 1, wherein

said frame number changing unit comprises a discrimination circuit for judging whether display data is motion picture data or still picture data, and a changing circuit for changing the frame number per unit time based on a result of the judgement by said discrimination circuit.

3. The display device of claim 2, wherein

when the display data is motion picture data, the frame number per unit time is increased compared with the frame number

for still picture data.

4. The display device of claim 1, wherein
said frame number changing unit comprises a detector for
detecting a temperature of said light switching element, and a
changing circuit for changing the frame number per unit time based
on a result of the detection by said detector.

5. The display device of claim 4, wherein
when the temperature of said light switching element is
higher than a predetermined temperature, the frame number per
unit time is increased compared with the frame number for a
temperature lower than said predetermined temperature.

6. The display device of claim 1, wherein
said light switching element is a liquid crystal display
element.

7. The display device of claim 2, wherein
said light switching element is a liquid crystal display
element.

8. The display device of claim 4, wherein
said light switching element is a liquid crystal display
element.

9. The display device of claim 6, wherein

said liquid crystal display element includes a liquid crystal

material having spontaneous polarization.

10. The display device of claim 7, wherein

said liquid crystal display element includes a liquid crystal

material having spontaneous polarization.

11. The display device of claim 8, wherein

said liquid crystal display element includes a liquid crystal

material having spontaneous polarization.

12. The display device of claim 6, wherein

said liquid crystal display element comprises an active

element corresponding to each of a plurality of liquid crystal pixels.

13. The display device of claim 7, wherein

said liquid crystal display element comprises an active

element corresponding to each of a plurality of liquid crystal pixels.

14. The display device of claim 8, wherein

said liquid crystal display element comprises an active

element corresponding to each of a plurality of liquid crystal pixels.

15. The display device of claim 9, wherein said liquid crystal display element comprises an active element corresponding to each of a plurality of liquid crystal pixels.

16. The display device of claim 10, wherein said liquid crystal display element comprises an active element corresponding to each of a plurality of liquid crystal pixels.

17. The display device of claim 11, wherein said liquid crystal display element comprises an active element corresponding to each of a plurality of liquid crystal pixels.

18. A display device employing a field-sequential method for displaying a color image by sequentially switching a plurality of colors of emitted light of a light source within one frame and by synchronizing a light-emission timing of each color of emitted light with a switching of a light switching element for controlling an intensity of light for display, comprising:

a changing unit for changing a frame number per unit time.

19. A field-sequential display method for displaying a color image by sequentially switching a plurality of colors of emitted light of a light source within one frame and by synchronizing a light-emission timing of each color of emitted light with a switching of a light switching element for controlling an intensity of light from

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said light source for display, comprising:

judging whether image data is motion picture data or still picture data; and

changing a frame number per unit time based on a result of the judgement.

20. A field-sequential display method for displaying a color image by sequentially switching a plurality of colors of emitted light of a light source within one frame and by synchronizing a light-emission timing of each color of emitted light with a switching of a light switching element for controlling an intensity of light from said light source for display, comprising:

detecting a temperature of said light switching element; and

changing a frame number per unit time based on a result of the detection.